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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,296	12/08/2003	Steve W. Smock	1007-0584	2191

7590 12/09/2004

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EXAMINER

LUGO, CARLOS

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,296

Applicant(s)

SMOCK ET AL.

Examiner

Carlos Lugo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-14 is/are rejected.
- 7) ☒ Claim(s) 15-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, drawn to an oven door lock mechanism, classified in class 292, subclass 109.
 - II. Claims 11-20, drawn to an oven door mechanism, classified in class 292, subclass 110.
2. Inventions Group I and in Group II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require that a cam that pivotally moves with respect to a shaft connected to a motor as set forth in the subcombination. The subcombination has separate utility such as a lock mechanism for a different device such a washing machine, a vehicle, etc.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Mr. David Lockman on December 3, 2004, a provisional election was made without traverse to prosecute the invention of Group

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II, claims 11-20. Applicant in replying to this Office action must make affirmation of this election. Claims 1-10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

4. The specification is objected to because of the following informalities:

- Page 1 Line 2, change "10/ _____" to -10/730475-.

Appropriate correction is required.

Claim Objections

5. **Claims 18-20 are objected** to because of the following informalities:

- Claim 18 Line 20, change "and inducing additional movement of the latch" to - and wherein movement of the blocker induces additional movement to the latch-

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 11-14 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,796,932 to Tame.

Regarding claim 11, Tame discloses a lock mechanism comprising a mounting plate (22 and 115) mounted to a frame (12).

The lock mechanism further comprises a latch (74) mounted to the mounting plate for movement about a pivot axis (31) and rotatable about the pivot axis between an unlatched and latched position. The latch includes a follower surface (118) offset from the pivot axis.

A blocker (40) is selectable movable into a blocking position when the latch is in a latched position (Figure 5) for interlocking with the rotation of the latch such that the latch is locked into the latched position for locking a door in a closed position.

An electromechanical actuator (138) is mounted to a base plate (Figure 1). The actuator moves the blocker (40) and wherein movement of the blocker into the blocking position induces additional movement of the latch to pull the door closer to the frame (indirectly when the blocker 40 moves to a position wherein the lobe 54 hit the switch 116 and blocks the movement of the latch, Col. 4 Lines 7-34).

However, Tame fails to disclose that an actuator pin is at the mounted plate so that an end extends beyond the mounting plate. Tame discloses an actuator pin (16) that is supported at the door.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the actuator pin supported and extending from the frame, instead of the door, because the reversal of components in a prior art is considered as a design consideration that will not affect the mechanism of the lock.

As to claim 12, Tame disclose that the actuator (138) comprises a motor.

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As to claim 13, Tama fails to disclose that the blocker is rotated 60° or less. Tame illustrates that the angle difference between the lobes 52 and 54 is about 120°.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the claimed quantitative value (60°), since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

As to claim 14, Tame discloses that the mounting plate includes a front and rear mounting plates (22 and 115).

Allowable Subject Matter

8. **Claims 18-20 are allowed.**
9. **Claim 15 is objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 16 and 17 would also be allowed because the claims depend from claim 15.

Reasons For Allowance

10. The following is an examiner's statement of reasons for allowance:

Claim 18 is allowable over the prior art of record and claim 15 present allowable subject matter over the prior art of record because the teachings of the references taken as a whole do not teach or render obvious the combination set forth, including that the lock mechanism further comprises a lever or blockable member that is couple to the latch (claims 15 and 18).

Tame (US 4,796,932) fails to disclose that the lock mechanism further comprises a lever or blockable member that is couple to the latch.

Phillips (US 6,079,756) discloses a lock mechanism comprising a mounting plate (30) mounted to a frame and a latch (4) mounted to the mounting plate for movement about a pivot axis (at 36) and rotatable about the pivot axis between an unlatched and latched position. The latch includes a follower surface (46) offset from the pivot axis.

An actuator pin (60), movably supported by the mounting plate, includes an outer end (64) extending beyond the mounting plate for engaging the oven door (14) upon closure and a cam end (68) engaging the follower surface for rotating the latch into the latched position wherein the door is adapted to be captured by the latch.

A blocker (86) is selectable movable into a blocking position when the latch is in a latched position for interfering with the rotation of the latch such that the latch is locked into the latched position for locking the oven door in a closed position.

An electromechanical actuator (82) is adapted to move the blocker.

However, Phillips fails to disclose that movement of the blocker into the blocking position induces additional movement of the latch to pull the oven door closer to the frame. Phillips discloses that the blocker (86) is used only to block the rotation of the latch, not to impart additional movement to the latch.

Arute (US 4,593,945) discloses an oven lock mechanism comprising a mounting plate (10); a latch (24) that includes a follower surface (30) offset from the latch pivot axis; an actuator pin (28); a blocker (26); and an electromechanical actuator (29).

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However, Arute fails to disclose that movement of the blocker into the blocking position induces additional movement of the latch to pull the oven door closer to the frame.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number is 703-305-9747. The examiner can normally be reached on 9-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 703-308-2686. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

C.L.

Carlos Lugo
AU 3676

December 6, 2004.



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600